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## ORIGINAL DEPARTMENT.

### Lectures.

#### A LECTURE ON STRYCHNIA.

Its Nature, Chemical Tests, Physiological Test. Action, Quantities taken, Post-Mortem Appearances, Medical Use, Diagnosis, and Treatment.

By A. P. DUTCHER, M.D.,

Professor of the Principles and Practice of Medicine in the Cleveland Charity Hospital Medical College, Ohio.

I am induced on the present occasion to make a few remarks on this subject, from the fact that cases of poisoning by strychnia are becoming very common, and also from the unscientific and reckless manner in which such cases are frequently treated. I have now before me the report of a case where more than a dozen different therapeutic agents were prescribed in the course of an hour, and it would have puzzled the brain of the prescriber to have given a philosophical reason for the employment of one of them. Morphia, camphor, calomel, tartar emetic, bleeding, and several other things, were all used in rapid succession, and remarkable to record, in spite of a large dose of strychnia and everything else, the patient recovered.

The treatment in this case was mild in comparison with some that are recorded in the medical journals of the day, and a few that have fallen under my own observation. I shall ever remember the case of a young lady, who by mistake took half an ounce of EBERLE'S solution of strychnia. In the alarm and excitement of the moment, the physician in attendance gave an overdose of tartar emetic. Active and severe vomiting was produced, and she died in three days from acute gastritis. I have not the least doubt that, in many instances of poisoning by strychnia, medical agents are administered that do more damage than the poison itself. To obviate these evils, the nature and action of this drug must be better understood by every one engaged in the practice of medicine. This will, in our humble opinion, lead to a more rational mode of treatment, and save a vast amount of unnecessary medication.

#### I. THE NATURE OF STRYCHNIA.

Strychnia is a vegetable alkaloid, and is obtained chiefly from *strychnos nux-vomica*. It is also contained in the St. Ignatius bean, and in the Java poison called upas tieu-te, (*te-ú ta*.) It is said to have been discovered by PELLETIER and CAVENTOU, in 1818. The process of preparing it, now commonly in use, consists in first obtaining, either directly or through the medium of an alcoholic extract, a concentrated watery solution of its active salt, the igasurate of strychnia, (*ig-a-su-ri-a*;) in union with various other principles, in then decomposing this salt by means of caustic lime or magnesia, and lastly, in then dissolving from the precipitate, by boiling in rectified spirits, and impure strychnia, which is subsequently purified by repeatedly crystalizing it from its spirituous solution, with or without the aid of animal charcoal as a discoloring agent.

The pure strychnia readily crystalizes in elongated, oblique, colorless, octahedron crystals. It is permanent in air, fusible by heat, but not volatile, destitute of odor, but possessed of a bitter taste so intense as to be communicated to water containing only an eighty thousandth part of it. Indeed, its bitter taste may be said to constitute one of its most distinguishing attributes. It is the most bitter substance known. It is partially soluble in fixed and volatile oil and in boiling rectified spirits, insoluble in pure alcohol or ether, almost insoluble in cold water, but in a great measure soluble in boiling water. It is alkaline in its relation to vegetable colors, and forms, with acids, deficient and general crystalizable salts.

The chemical constituents of strychnia are,  $C_{42}$ ,  $H_{22}$ ,  $N_3$ ,  $O_4$ . It is recognizable according to PERREIRA, by its crystallizability, its alkaline properties, its combustibility, its intense bitterness, its difficult solubility in alcohol and water, and its solubility in the diluted acids.

#### II. CHEMICAL TESTS FOR STRYCHNIA.

Various chemical tests for strychnia have been devised, but most all of them are liable to objections. I will, therefore only present those which are now considered the most reliable. When you desire to test any liquid for a very minute propor-

tion of strychnia, that does not contain organic matter, you will find the following process the best. I give it as described by Dr. JOHN J. REESE in his article "On the Detection of Strychnia as a poison," etc., *Amer. Jour. of the Medical Sciences*, October, 1861, page 416.

"A solution is first made of any given quantity, say one-tenth of a grain in a fluid ounce of distilled water, with a few drops of acetic acid to insure solution. The number of drops contained in the portion of liquid is to be ascertained by means of a pipette, prepared by drawing out a glass tube to a fine point. The solution may then be diluted to any degree required. One drop of the liquid, representing the ascertained fractional part of a grain, is then to be placed upon a small, perfectly clean, white porcelain capsule, and evaporated to dryness either in the sun or by a very gentle heat. When cold, a drop of pure sulphuric acid is to be placed, by means of a glass rod, on the capsule alongside of the dry spot, but not in contact with it. Next, a small crystal of bi-chromate of potassa (or, preferably, of the ferricyanide of potassium) is to be laid on the dish; after which a clean, dry, and finely-pointed glass rod should be drawn through the drop of acid, so as to bring a little of it in contact with the spot; the little crystal is next to be moved by the rod once or twice over the moistened spot, when there will immediately appear, flashing out, as it were, the characteristic blue color—more or less transient, according to the amount of the alkaloid present, and passing through the usual tints."

By observing strictly this process you will always be enabled to bring out satisfactory results. I have frequently employed it, and never failed in but one instance in detecting the presence of strychnia; a very little practice will make the operation easy, and you cannot fail in it if all the details are observed.

When a number of organic matters are present in a liquid to be tested for strychnia, the process must, as a matter of course, be more complicated. For this purpose all of our best authors on poisons recommend GRAHAM and HOFFMAN's test; it was devised to detect the presence of strychnia in the bitter ales of BURTON, and is said to be applicable to all fluids. The process is conducted in the following manner: Two ounces of animal charcoal are to be shaken in half a gallon of the suspected liquid, and this is to be left at rest for a night, and then filtered through paper. The fluid is thus deprived of its bitterness. The charcoal, which contains the strychnia, is then boiled, for half an hour, in eight ounces of rectified spirits, and after being filtered, is removed by

distillation. The remaining liquor, which is watery, is next decomposed with a few drops of solution of potash, and agitated with an ounce of sulphuric ether. The ether contains the strychnia in considerable purity, and being evaporated, it deposits a white soluble matter of intense bitterness. If a drop of sulphuric acid is placed upon the residuum, and then a fragment of bichromate of potassa placed in the resulting liquid, a beautiful *violet tint* appears at the point of contact, and soon spreads over the whole fluid. This change of color is characteristic of the alkaloid strychnia. A half grain of strychnia may thus be detected in a gallon of liquid.

Mr. LONDALE's test is very much admired by some chemists. It is perhaps the best there is for ascertaining the presence of strychnia after it has been absorbed from the stomach and entered the tissues of the body. It is employed thus: A portion of the liver or muscle must be boiled in water strongly acidulated with sulphuric acid; the mixture must then be filtered, and to the liquid thus obtained, a quantity of carbonate of lime is added, sufficient to neutralize the acid. This must then be evaporated to dryness, and digested with rectified spirits; after which filter again, to remove its soluble matter. The result will be, after further evaporation, a clear liquid which has a slightly yellowish color, distinctly and persistently bitter to the taste. To this alcoholic extract a few drops of a strong sulphuric acid may be added in connection with a small quantity of powdered bi-chromate of potassa. If strychnia is present, a *purplish tint* will be first observed, which will very speedily change to a *bright green*, that will remain permanent.

Another test for strychnia, sometimes employed by chemical experts, is that devised by Dr. LETHBRV. His method is as follows: A drop of the strychnia solution is placed in a cup-shaped depression made in a piece of platinum foil. After evaporating to dryness, the spot is moistened with a drop of strong sulphuric acid. The foil is then connected with the positive pole of a single cell of GROVE's battery, and the platinum terminal of the negative pole is made to touch the acid. Instantaneously the blue color flashes out with remarkable beauty and brilliancy. Dr. REESE says he has repeatedly performed experiments with this test, and could detect strychnia in quantity as small as 1-50,000th to the 1-100,000th of a grain, but adds that it failed in his hands to detect those extremely minute portions that he could by the test of his that we have given.

But for special reasons, all of these tests may

fail to detect the presence of strychnia in a fluid, when it really exists. When morphia has been given before or immediately afterward, although the dose of strychnia has been sufficient to destroy life, it cannot be detected by the chemical tests. So says Dr. REESE, in his article from which we have quoted.

[To be continued.]

## Communications.

### TRIAL FOR MAL-PRACTICE.

Reported for the Medical and Surgical Reporter.

An interesting trial, developing some strange medical testimony, given for the purpose of shielding an irregular practitioner, and calculated to injure a brother member of the profession, has lately been concluded in the District Court of Allegheny county, Pa., before the Hon. HENRY W. WILLIAMS, judge of said court. The case occupied the attention of the court for four days, and was ably tried by A. M. BROWN, and J. J. SIEBENECK, Esqs., for plaintiff, and C. B. M. SMITH, J. H. HAMPTON and J. J. KETHEN, Esqs., for the defendant.

The action was brought in July, 1863, by Mrs. CATHERINE BRAUNBERGER, (for the use of herself and children) against Dr. GEORGE CLEIS, to recover damages for the death of her husband, ALBERT FREDERICK BRAUNBERGER, caused, as plaintiff alleged, by the negligence and mal-practice of the defendant.

The case was first tried in December, 1864, and resulted in a verdict for plaintiff for \$2,900. A new trial was awarded for reasons unnecessary to be mentioned here, and upon the second trial, concluded March 23, 1865, the jury gave a verdict for \$3,250, against the defendant.

The prompt and just verdict rendered within an hour after an able and clear charge by the judge, places the seal of reproach and condemnation upon the efforts of those who voluntarily arrayed themselves against reason, justice and common sense. Their unworthy attempts to bolster an empiric, and to injure a professional brother, signally failed, and humanity and right demand an exposure and publicity of the exceptionable course of those witnesses during the trial. This is due to the profession at large, but more especially to the junior members, who may have been so unfortunate as to incur—by their acknowledged superior attainments and skill—the malignant jealousy of older, but less wise and less skilful professional compeers. Whether old or young, merit and scientific skill in the medical, as in every other profession, should alone be the

test and standard of public appreciation and patronage.

I have thus, to the best of my ability, and with a pure motive of justice and truth, exposed the concerted efforts of professional men to degrade their profession, and in so doing, I conceive that I have discharged a *professional* and *public* duty. In conclusion, I submit to the reader the following as a correct statement of the facts and testimony in the case, together with the able and lucid charge of Judge Williams, and the verdict of the jury.

ALBERT FREDERICK BRAUNBERGER, aged about 36 years, a strong and healthy man, of active, industrious and temperate habits, enjoying uninterrupted good health, whilst attending an engine on June 1st, 1863, in Pittsburg, was severely injured in his left leg by coming in contact with the machinery. A piston rod, about two inches in diameter, struck his limb below the knee joint, the posterior part of the same being supported by some part of the machinery, lacerating skin and muscles, and comminuting the bones extensively; there being but one inch space between the piston and that part of the machinery, against which the limb rested. Immediately after the accident (about 9 o'clock, A. M.,) BRAUNBERGER crawled from the engine to the door of the building, a distance of twenty feet, where he sat down upon the steps and called to a fellow-workman to come and carry him home. Two persons assisted him to walk, and then carried him into a neighboring house. Dr. GEORGE CLEIS, was immediately brought in, and upon an examination of the wound, pronounced it "*only a flesh wound,*" and assured the injured man and his friends that "*he would soon be well and able to work.*" After the bleeding had stopped, the wound was *sewed* up and linen cloths and cold water applied.

The man was then carried home and chamomile tea ordered as a drink. On the *second* and up to the *seventh* day, B., was rational, cheerful, and able to eat, and talked to all who visited him, though complaining all the while of his leg, expressing his firm belief that it was broken. Dr. C., visited him at least once a day, and repeatedly declared that it was a *flesh wound*, that the bone was not broken, and that the man would soon be well. Nothing appears to have been done for the limb beyond the application of cloths saturated with cold water.

JOHN REHRER, who nursed B., says that he was sensible and lively up to the seventh day of June. On that day his condition became a great deal worse, and Dr. C. ordered him to apply warm water to the limb. He states that the body of

the man became cold, and his mind wandered when he dozed or slept, that high fever set in with great thirst, and that his abdomen began to swell, the whole limb having become swollen some days before with profuse and offensive discharge from the wound. He told Dr. C. that they wanted another physician called in, and that they must have one. On the day following Dr. C. brought, in the afternoon, Dr. KERN, who upon examining the wound, cut the stitches and removed one or two pieces of bone, pronouncing it a case of compound comminuted fracture, which absolutely required amputation. Dr. C. at first disputed with Dr. KERN as to the character of the injury.

Dr. WM. KERN, says: "Saw the patient on June 8th, at 3 P. M., found the limb inflamed and very much swollen. Made an incision, limb full of dark humor. Limb above the knee was healthy, the line of demarcation was distinct. Gave patient stimulants—the case needed it. Told Dr. C. the case was dangerous, and I thought we ought to take the leg off." Drs. W. KERN, J. BROOKS, and G. CLEIS, met on the 9th for consultation. Dr. BROOKS then examined the case.

Dr. KERN, farther says: "We came to the conclusion that the only alternative was to take the limb off. CLEIS, BROOKS and myself, agreed to amputate the limb then on that day. Think that the patient on the 9th, while Drs. B., C., and myself were there, was in a condition to have the limb amputated. Some of the friends of BRAUNBERGER, however, expressed an earnest desire to have Dr. A. G. WALTER consulted, whereupon Drs. CLEIS and KERN considered themselves dismissed and retired (with Dr. BROOKS) from the case.

Dr. KERN was a witness for the defence, and further stated, upon cross-examination, that he could not tell whether the case had been treated properly by Dr. CLEIS, or whether or not the sewing up of such a wound was proper treatment!

On first trial Dr. KERN gave the following testimony:—"Found leg in a putrid state, effluvia were so offensive that I had to put a handkerchief over my nose. On meeting Dr. BROOKS next morning in the case, Dr. B., at first thought that there was no fracture, but came to the conclusion that I was right after examining the wound with the finger. We both insisted on immediate amputation as the only chance to save the patient, who was very weak, and the wound suppurating profusely. Would not amputate when the man was bleeding very much, would first arrest the hæmorrhage. A fracture is called comminuted when the bones protrude through the muscles as

in this case. There is a possibility that this fracture could have been overlooked and mistaken for something else. Do not recollect whether the wound had been stitched or not. Patient would have survived the amputation; do not know that it would have saved his life. Amputation should have taken place on the 9th, it was wrong to postpone it to the 16th of June."

Dr. A. G. WALTER, who reluctantly appeared as a witness, and had to be brought in by process of Court, says, "I was called to see B. on the 9th of June, about noon, found him dangerously ill with a limb hopelessly injured nine days before. The injury was caused by machinery. There was a large gangrenous wound of nearly the size of my hand, below the left knee, discharging very offensive matter in large quantity. The whole limb from foot to groin was enormously swollen—the result of phlegmonous erysipelatous inflammation. The limb laid upon its outside with knee bent, the tibia itself was curved below the knee from fracture. The muscles below the knee were lacerated, broken up, and ground by force of machinery, those of the thigh were completely dissected by matter, which had formed between them up to the groin, from which it could be easily pressed downward and outward. The knee joint itself was full of matter and perfectly disorganized. The head of the tibia and its shaft to below the middle was broken longitudinally and transversely into a great many pieces; the former being completely ground, admitting the point of all the fingers into its cavity. The fracture extended into the knee joint in three directions. Such an amount of local injury could not exist without extensive and dangerous suffering of the system. I found the patient delirious, with high irritative fever, flushed face, hurried respiration; dry tongue, a small, feeble and rapid pulse, tumultuous action of the carotids and heart, and profuse clammy perspiration; symptoms which plainly indicated the violent and last struggle of the system of a powerful man, against one of the severest injuries which could have happened to him. His strength being exhausted, it was evident that speedy dissolution would follow, if no relief could be afforded by removing the limb. The limb should have been amputated at once, or soon after the injury; this is the rule of practice, sanctioned by every intelligent, civil and military surgeon of all nations, in injuries of this character, where the soft parts and bony structures are so extensively lacerated and crushed, the fracture extending into the joint, as to preclude all hope of reparation. The bones were not simply broken, they were absolutely ground; the skin and mus-



cles were not merely lacerated, but bruised, beaten and deprived of all vitality by the force of machinery; the joint itself was opened and one of its articulatory surfaces broken into several pieces. The limb, I say, should have been amputated at once, when the injury was fresh, and before the system at large had become involved, not only sympathizing with the injured part, but violently resisting the inroads of a destructive process, going forward in the limb, which process, though local at first, becomes destructive to the system at large. Such being the condition of the patient when I saw him on the 9th of June, I felt sure that there was no chance *then* for amputation under these circumstances. If I had amputated at that time, more than likely the man would have died in my hands. But he could not live with the limb, this had to be sacrificed if life could be preserved. Yet, how to preserve the latter? This was the question, which, though of doubtful probability, still did not justify inaction on the part of the surgeon. Considering that the train of constitutional symptoms were indicative of the highest general irritation, the result of excessive suppuration, with its consequent debilitating and enervating influences, and that well marked symptoms of pyæmia, or poisoning of the blood, with matter taken into the system (which would have precluded all hope of recovery) were still absent, it was clearly my duty to try to allay the fever, and to sustain the vital power by tonics, stimulants, anodynes and nutrients, so as to place the system in a condition to bear up under the local destruction, while locally, about the injured limb, all sources of irritation were to be removed as much as possible, by placing it in an easy supported condition, and giving free exit to matter, before risking amputation as a final resort. With this view I placed the limb upon a cushioned splint, had the remaining stitches removed, made a free long incision through the gangrenous wounds, into the knee joint, extending upward into the thigh, allowing the matter thus secreted to escape, and removed all loose and detached pieces of bone, of which there were a great number. Frequent ablutions of the large wound, with aromatic and antiseptic lotions and poultices, constituted the local treatment. This local and general treatment faithfully persevered in, had the effect of calming the nervous and vascular excitement; the man became again rational, frequency of pulse decreased, appetite returned, the tongue became moist, tympanitic distension of abdomen, and profuse perspiration disappeared, and the wound, before pale and dirty, became fresher looking, discharging matter in less quan-

tity, and of a less offensive character. Continuing this medication up to the 16th day—the patient gradually improving—I felt that the moment had arrived, when removal of the limb might be risked—the patient himself and his friends earnestly soliciting its removal. Further delay was evidently out of the question, as no more improvement could be expected; on the contrary it was justly apprehended that rapid sinking again might set in, or that pyæmia might be superadded with no more chance of amputation. The patient and friends, being fully apprised of the great risk of amputation under these circumstances, and of its more than probably fatal result, still insisted on the last trial. The limb was accordingly removed at the upper third of the femur. The patient died the next day."

Dr. WALTER further stated that *sewing up* the wound and enclosing the foreign matter, (broken pieces of bone, coagulated blood, and putrid pus,) and keeping it thus stitched up for nine days, was very bad treatment. He knew BRAUNBERGER's excellent and powerful constitution well; having attended him for a compound comminuted fracture of an arm, some years before, and believed that his life could have been saved by primary amputation. The limb should have been amputated within a few hours, or a day, as soon as the system had rallied from the shock. Knowing his vigor and powers of endurance, he felt confident that there was no shock, justifying the delay of amputation. Reaction means rallying of the system from the shock. When an injury befalls a person, the nervous system receives the first impression, and this shows itself by various symptoms of greater or less intensity, in proportion to the amount and severity of the injury received, the particular part injured, and the constitutional powers of the injured person. A strong man will bear an injury much better than one of weak vital forces and feeble constitution. We call this "the shock." It is analogous to fainting or a paralytic condition of the system or part. Under the influence of shock, we find the surface of the body cold—particularly the extremities—the skin is pale, lifeless, and bloodless; pulse, small, feeble, and sometimes hardly perceptible in beat. The patient is generally very sick at the stomach, and vomits or rejects everything offered him; he is restless, he becomes insensible, his condition is approaching stupor. Bleeding generally stops, or there is less bleeding in that state than otherwise, unless large vessels are ruptured; the wound becomes dry and pale. Diarrhoea sometimes sets in, and death soon follows, say within twenty-four hours, unless a

change takes place. The effects of the shock, however, are modified according to the organ principally injured. Heat of surface of the body returning, moderate volume of pulse at the wrist reappearing, with calmness of mind and body, and desire for drink and food, etc., indicate rallying, the first degree of reaction. I would amputate in the rallying state of the system, and not wait for full reaction, this being a state of dangerous excitement, if not of actual inflammation.

Dr. WALTER was the only surgeon examined on the part of the plaintiff; on the part of the defendant, Drs. WM. KERN, GEO. MCCOOK, and JAS. BROOKS were examined.

Dr. KERN's testimony has been stated briefly already.

Dr. BROOKS testified that he saw BRAUNBERGER with Drs. CLEIS and KERN. The man's knee and leg were broken. Limb much swollen. Pulse feeble; swelling from feebleness and inertia—a kind of dropsical inflammation. Amputation (on the 9th) would have availed nothing. I did not agree to amputate. I said to the Doctors (KERN and CLEIS) that amputation would avail nothing. In my judgment, the man *never* had rallied, although I never saw the man but *once*, and that was on the 9th day after the injury. I could tell by *looking* at him that his system had never rallied. I am sure there was not reaction in that man from the beginning. There was no line of demarcation. Amputation would have done him no good; it would have only hastened his death.

On the *first trial*, he testified as follows: B. was in a dead state, the limb was sloughing or in a state of mortification. The leg and thigh were a great deal swollen, and there was a dropsical effusion. The part was dead. The conclusion we came to (on the 9th) was that the man would die. We did not conclude that amputation should take place. I thought then, and yet, that no good could have resulted from amputation.

A witness for defense testified that BRAUNBERGER complained (after some days) of pain in his back.

Dr. GEO. MCCOOK testified that amputation should never be performed till reaction had taken place. That he *never* saw BRAUNBERGER, but he was of the opinion that reaction had *never* taken place, because of the alleged *pain in the back*; and that amputation of the limb could not have been safely performed at any time. "Pain in the back," says Dr. MCCOOK, "is one of the worst indications of shock, and I never knew a man recover who complained of that. The pain in the back goes to show the effect of the shock—*extreme shock*."

I would despair of restoring a man in BRAUNBERGER's condition on the 9th of June, as found and described by Dr. WALTER. It would be my duty to assist nature in effecting a reaction. It was bad surgery to sew up the wound."

On the *first trial*, he testified: "The effluvia mentioned by Dr. KERN, as existing on June 8th, indicated that mortification had commenced. I would have amputated the next day after the accident. If amputation had taken place the next day, (June 2d,) it is almost certain that the man would have lived. I would not have amputated the limb on the 16th. If I had amputated at all, I would have done so at once on the 9th.

The defence claimed, first, that the testimony of Drs. McCook and Brooks established the fact that *reaction never* had occurred, and that amputation could not have been performed; and, secondly, that if reaction did occur, it occurred on the 9th of June, after Dr. KERN administered stimulants, and that amputation should have been performed then, Dr. KERN having testified that he believed amputation could have been performed safely at that time, and that the calling in of Dr. WALTER prevented the performance of the operation on the 9th of June.

The testimony of Drs. KERN and Brooks conflicted, however, upon the material questions affecting the condition of the patient, and the propriety of amputating the limb. The jury adopted the *views and theory* of Dr. WALTER, and gave their verdict for the sum of *three thousand two hundred and fifty dollars*.

To be continued.

#### DEFECTIVE AND IMPAIRED VISION, With the Clinical Use of the Ophthalmoscope in their Diagnosis and Treatment.

By LAURENCE TURNBULL, M.D.,

Of Philadelphia.

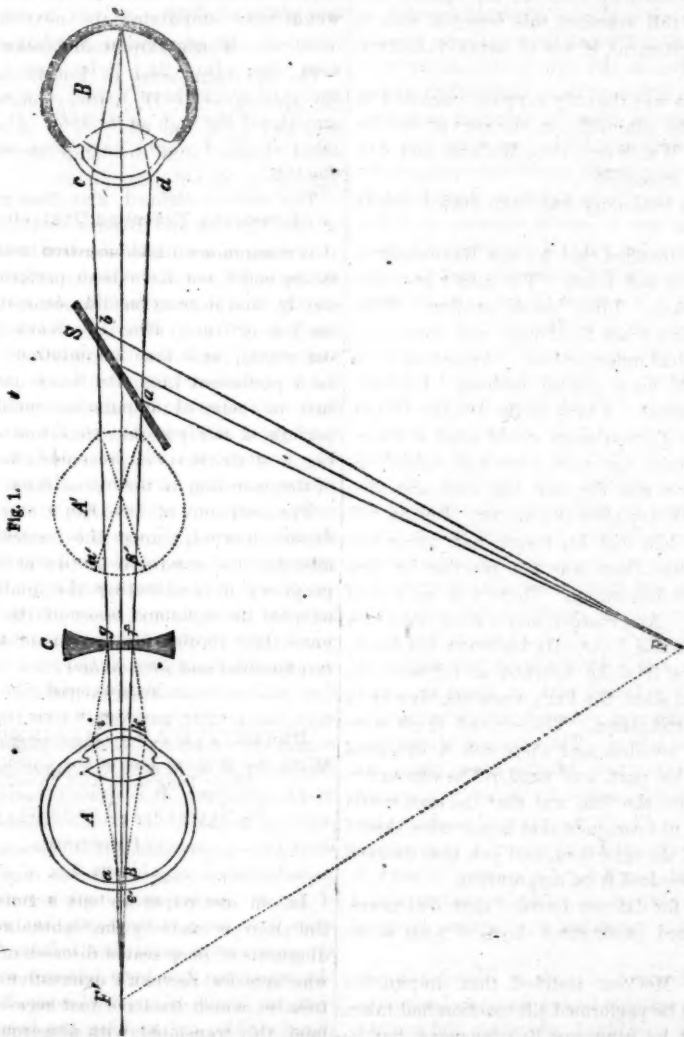
#### PART 2.

In our last paper we took a general survey of the progress made by the Ophthalmoscope, in the diagnosis of deep-seated diseases of the Eye. It was from Dr. ZANDER's exhaustive and masterly treatise, which we have just received from England, ably translated, with numerous additions by Dr. CARTER. In our former papers we quoted from this work, but it was from the edition of 1859. The translation of Dr. CARTER was of the edition of 1862, and since its publication the author has departed this life. The treatise of Dr. ZANDER was a compilation, but a most valuable one; and the translator did not consider that it possesses any literary claim to exact reproduction,

but has endeavored to render the precise meaning of every sentence, and we think he has been successful.

"He well observes the time has arrived for the second period in the history of this great invention. The knowledge laboriously obtained and perfected by a few, has now to be diffused

through, and utilized by the great bulk of the profession." No one has endeavored to do this more than the writer of these pages. I have in my former papers given the theory of the instrument, but no drawing to illustrate it that was satisfactory to myself; but in this number I have one that will be found clear, simple, and satisfac-



tory, illustrating the principle on which this most valuable instrument depends in its most primitive form.

If we throw a ray of light from a lamp on a glass mirror into the human eye in a dark room, the eye will give a reddish lustre, which is the reflection from its fundus. Such conditions

are shown in Fig. 1, "where  $F$  is a luminous point, and  $S$  a polished plate of glass, which reflects the light  $a b$  falling upon it, into the observed eye  $B$ , in a direction as if it came from a point  $F'$ , lying as far behind the plate  $S$  as the actual point  $F$  lies before it.

"Disregarding the loss of light caused by ir-

regular reflection and other circumstances, the rays  $a d$  and  $b c$ , reflected from  $S$ , enter the observed eye, and become united upon its retina at  $e$ . The emerging rays in their exit from  $B$ , must take precisely the same course as in their entrance; they proceed, therefore, in the converging cone  $c b a d$  to the plate of glass, by which they are partly reflected back to  $F$ , while the remainder proceed in an unaltered direction forward, to unite in a focus at  $F'$ , and then again to become divergent. If now the eye of the observer be placed so as to intercept them before their union, as at  $A'$ , it receives from  $e$  convergent rays that, made more convergent by its own refraction, are united before they reach its retina, upon which, after crossing, they form only the dispersion circle  $a' \beta'$ . The eye  $A'$  would certainly therefore receive no image, but only the sensation of light—it would see the eye  $B$  illuminated; and the same would happen if it were so placed as to intercept the diverging rays behind the point  $F'$ .

"After this principle was announced by VON ERLACH, Professor H. HELMHOLTZ, then of Königsburg, and since of Heidelberg, was the first to discover the reason why the retina was not distinctly seen, and to find the means for rendering it visible. The problem was threefold: the observed eye must be sufficiently illuminated; the eye of the observer must be placed in the direction of the emerging rays; and these must themselves be changed from their convergence, and rendered divergent or parallel. The solution of the main difficulty was obtained when, in a darkened chamber, the light of a lamp was allowed to fall on a well polished plate of glass, in such a manner that the rays reflected therefrom entered the eye to be observed. The observer placed himself on the other side of the glass plate, and made the convergent rays divergent by a concave lens. Thus, in Fig. 1, we place a concave glass  $C$  before the eye of the observer  $A$ , and convert the convergent pencil  $b g f a$ , coming through  $S$ , into the divergent pencil  $g i k f$ , so that the eye  $A$  may form upon its retina at  $e'$  a clear image of the point  $e$ .

"The combination of such an illuminating apparatus, with suitable lenses, forms an instrument by which it is possible clearly to see and examine the details of the background of the eye of another person. To this instrument HELMHOLTZ gave the name of EYE-MIRROR, or OPHTHALMOSCOPE."—ZANDER.

In our former papers we gave a description of the chief of the ophthalmoscopes with reflections formed by parallel surfaces of glass; also a drawing of HELMHOLTZ's Ophthalmoscope, to which we

refer our readers. In his work ZANDER has added a modification, contrived by REKOS, of a revolving disk serving to hold the necessary concave lenses. The disadvantages of this instrument are the feeble illumination of the fundus oculi, and disturbing reflection from the cornea; which last objection is diminished as much as possible by polarization of the light, by means of four plates of glass.

#### Follin's Ophthalmoscope.

The ophthalmoscope of FOLLIN is essentially the instrument of HELMHOLTZ rendered stationary, and with the addition of a convex lens, which, placed near the lamp, throws divergent light upon the reflecting plates.

#### Laurence's Reflecting Ophthalmoscope.

"Before following Dr. ZANDER in his account of the Second Class of Ophthalmoscopes, it is necessary in this place to describe an instrument very lately invented by Mr. J. ZACHARIAH LAURENCE, and occupying a position intermediate between the first class and the second. It consists essentially of a piece of plate-glass, interposed between the eye of the patient and the source of light. The arrangement will be readily understood by reference to Fig. 1, in which, for our present purpose,  $B$  will represent the eye to be examined,  $F'$  the flame, and  $F$  the eye of the observer; and the eyes  $A$  and  $A'$ , and the lens  $C$ , may be left wholly out of account. The rays of light from  $F'$  penetrate the glass plate  $S$ , and enter the eye  $B$ , from which they return, either divergent, convergent, or parallel, according to the state of  $B$ 's refraction and accommodation. Of these returning rays, the greater part again pass through  $S$ , and regain their source; but some portion will be reflected by  $S$  to  $F$ , and will there become visible to an observer. It is quite conceivable that an observer might, under these circumstances, see an erect virtual image of the fundus, for which purpose he would require the aid of a concave lens if the eye under examination were myopic, or even if it were emmetropic, but accommodated for some nearer point than infinite distance. As the apparatus has been hitherto arranged, however, no details of a virtual image have been rendered visible, and nothing has been seen in this way but the red reflex of the fundus. It is probable that the loss of light by the transparency of the reflecting surface has been one cause of this imperfect success. By interposing a convex lens between the eye  $B$  and the plate  $S$ , a much better result has been obtained. The first effect of such a lens is to concentrate the light it receives from the flame, and thus to increase the illumination



of *B*'s retina. Its next effect is to render the returning rays convergent, and to bring them to union in or near the plane of its principal focus; where they form an inverted actual image of the parts of *B*'s retina, from which they proceed. Diverging from this image, the rays impinge upon the plate *S*, and are reflected by it in sufficient quantity to afford to the spectator at *F* a very fair view of the optic nerve and vessels. These are seen partially inverted, that is to say, upside down, but not displaced laterally; in a way that will be better understood when I come to describe the effect that is produced by Dr. HEYMANN'S aut-ophthalmoscope. It is, of course, essential that the convex lens and the glass plate should be separated by a greater interval than the principal focal length of the former; and the more this interval is increased, the larger will be the size of the image, and the fainter its illumination. The surfaces of the glass plate must be perfectly parallel, and perfectly smooth; as, otherwise, a separate image will be reflected from each of them, and the two images will confuse one another. There will also be an image reflected backward from the lens, and visible to a spectator looking over the shoulder of the patient.

"By modifying the inclination of the plate *S*, the position of the point *F* may be greatly varied, and the reflection may even be thrown into the other eye of the person under examination, so as to convert the apparatus into an aut-ophthalmoscope. By such an arrangement I have found it easy to see with either of my eyes the luminosity of the other; but I have not succeeded in observing details. The acuteness of the angles of incidence and reflection is a formidable difficulty in the way of self-examination by such a method.

"The experimental instrument employed by Mr. LAURENCE consists of a horizontal stem about a foot long, supported by an upright stand. Two small uprights slide in a groove on the upper surface of the stem; and carry, one a convex lens of 2" focal distance, the other a small square of plate glass, both so arranged as to turn upon their vertical axes. The light is furnished by an argand burner, surrounded by an opaque chimney, with a single small opening; and the place of examination is otherwise completely darkened. The patient is placed about three feet from the lamp, the convex lens about 2" from the cornea, and the glass plate about 4" from the lens. The eye, the lens, the plate glass, and the flame, must all, of course, be perfectly on the same level, and their centres must be in the same straight line.

"I have described the apparatus at some length, because it appears likely, if it can be brought

nearer to perfection, to render important aid in the instruction of students. The reflection is visible to more than one observer at once; and may, perhaps, hereafter be rendered visible to a class. At present the matter is entirely in its infancy; and nothing but the principle can be considered as established. The idea was suggested to Mr. LAURENCE by the celebrated 'Ghost' of Messrs. DIRCKES and PEPPER, which is produced in a very similar manner.

"Still more recently, Mr. LAURENCE has modified his instrument in the following way:—He illuminates the eye by a lantern having only one opening for the exit of light; and places in this opening a convex lens of such power that the flame is in its principal focus. By this arrangement the rays proceeding from the lantern are rendered parallel. They pass through the plate of glass to reach the eye; and, under ordinary circumstances, will retain their parallelism on their backward course. The biconvex lens is then placed, not between the plate and the eye observed, but between the plate and the spectator; so as to unite the rays into an actual image after they have undergone reflection, instead of before. The image thus formed may be magnified by a second lens; and Mr. LAURENCE unites the two in a tube, which thus resembles an astronomical telescope, and is levelled at the reflecting plate. Mr. LAURENCE proposes to convert this tube into a terrestrial telescope, by the addition of an erecting eye-piece.

"The formation of the actual image subsequently to reflection, brings this form of ophthalmoscope into the ordinary position of being only available for one observer at a time. Mr. LAURENCE informs me that it gives very good results; but, beyond simplicity and cheapness, I am not aware that he claims for it any special advantages. It is, however, of such recent invention, that time and further experiments are needed for the determination of the degree of excellence that it is calculated to attain."—CARTER.

## Medical Societies.

### MINUTES OF THE SIXTEENTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION.

*Held in the city of Boston, June 6th, 7th, and 8th, 1865.*

FIRST DAY—Tuesday, June 6th.

Conformable to regulations, the Association convened on the 6th day of June, 1865, in the House of Representatives, and at 11 A. M., was called to order by the President, N. S. DAVIS, M.D., of Illinois, sustained by Vice-Presidents W. H.

MUSSEY, M. D., of Ohio, WORTHINGTON HOOKER, M. D., of Connecticut, and the Permanent Secretary, WM. B. ATKINSON, M. D., of Philadelphia.

Prayer was offered by Rev. S. R. LOTHROP, D.D., of the Brattle Square Church.

HENRY JACOB BIGELOW, M. D., chairman of the committee of arrangements on the part of the medical profession of Boston, then made an address of welcome: he bade them all a cordial welcome to the metropolis of New England. Sixteen years ago, these same walls were honored by the presence of the Association, and since then they had met in distant cities. He spoke of the warm hospitality extended to the Association in various southern cities, and of changes that a few years had brought about. He then referred, in glowing and eloquent terms, to the great ordeal through which the country had triumphantly passed, and to the dawning of that peace in whose genial sunshine our nation would now pursue its grand and noble career.

It was now time to consider whether something could not be done to make the Association still more useful. Each year augments the number of medical philosophers. The magnitude and importance of the Association should keep pace with the growth of the republic. While the great republic is fulfilling its glorious destiny, they should not be unmindful of the work of alleviating human suffering.

I welcome you, gentlemen, in behalf of the committee I have the honor to represent, of the old Massachusetts Medical Society, which cherishes a matronly regard toward her younger sisters of other States, in behalf of the city of Boston, which extends to you its civic hospitality. Welcome, friends and brothers! assembled from distant regions of our common land—from the great commercial emporium through whose aortic thoroughfare pours the ceaseless tide of nations; you, from the city whose traditional brotherly love so freely echoes from the lips of our wounded soldiers; you, brothers of New England, born to the common heritage of toil and freedom; you whose home is by the great western water-courses, whose blood sprang from the same fountain as our own, and has so often mingled with it again upon the battle-field; and you, few we may fear, but thrice welcome, loyal and faithful brethren of the South, who have passed through the long night of trial that you might hail to-day the glorious dawn of liberty. Welcome, fellow-citizens of the redeemed republic, whose wounds you have bound up in binding up those of her defenders. Welcome, all who honor us by their

presence on this auspicious morning which be-holds the sacred emblem of liberty restored to its rightful place, tattered with bullets, stained with blood, fringed with the sable ensign of mourning, outspread over every stronghold from which treason had struck it down, and soon to rekindle all its ancient glories.

The Secretary called the roll of the Association. One hundred and sixty delegates were present.

The President, Dr. N. S. DAVIS, of Illinois, then, on motion, delivered his address. He spoke in substance as follows:

*Gentlemen of the American Medical Association:*

In entering upon the discharge of those duties imposed on me by your generous partiality one short year since, I was constrained to do it with expressions of deep regret that the great struggle for subduing a gigantic rebellion was still continuing, and that in consequence, the seats of many of our professional brethren whose cordial hands and warm hearts had so often greeted us, were still vacant. Those expressions of regret were accompanied by the hope that, before the day for this annual gathering should come, the dark and desolating cloud of war would be broken, and give place to the radiant bow of peace, with former friendship restored, and our national union unbroken.

It is my highest pleasure to congratulate you, to-day, that what we then so fondly hoped for, is now substantially accomplished. The cherished flag of our country again waves in triumph over every part of our almost boundless domain, and the patriotic legions who have borne it proudly on so many bloody fields of human strife, are returning to their peaceful firesides, decorated with wreaths of victory and enshrined in a nation's gratitude.

But our congratulations to-day are still mingled with a deep shade of sadness. Sadness, that so many of our fellow-countrymen have been compelled to sacrifice their lives in defence of the integrity and perpetuity of our government. Sadness, that so many of our professional brethren have been constrained to abandon the peaceful pursuit of their humane calling at home, and sacrifice comfort, health, and sometimes life, in the noble effort to mitigate the calamities and sufferings of war.

And a deeper, more enduring sadness, that to the desperate wickedness of treason has been added the darkest crime that can disgrace human nature—the deliberate murder of the Chief Magistrate of this great republic. Let us hope, however, that in this act, the climax of human wickedness has been reached, that the cup of our nation-

al calamities has been drank to its bitterest dregs, and with becoming humility, in the true spirit of our humane calling, let us implore the Sovereign Ruler of the universe to make our reunion one of hearts as well as States, and our great nation one in which labor shall everywhere receive its just reward, whether in the workshops and humble cottages of the North, or on the sunny plantations of the South.

And by a natural transition, I turn to consider the work of death in the ranks of the Association, and I allude, in the highest terms, to the unrivalled ability, professional skill, ripe scholarship, and Christian deportment of JONATHAN KNIGHT, of New Haven, and to the splendid surgical attainments of him, who, in his profession, was renowned the world over, VALENTINE MOTT, of New York. The deaths of T. D. MITCHELL, of Philadelphia, WM. E. COALE, of Boston, and SYLVESTER D. WILLARD, of Albany, were also alluded to.

A review of the history of this Association for the past twenty years will show that three important interests were involved in its existence: The improvement of our system of medical education, the direct advancement of medical science and practice, and the promotion of social intercourse and fraternal feeling throughout the entire profession. And the advocates and supporters of each and all three, he claimed, were to be found at this meeting.

One former evil had been the referring of papers, without full reading, to the printing committee for publication. The result was an annual report filled to repletion with reports, papers, and resolutions, read to the Association by their titles only, while a costly social entertainment was allowed to usurp their place. To remedy these evils certain changes were made, but they had not been effectual. Special committees did not meet in half the cases; one dinner had been exchanged for half a dozen lesser ones, and a fourth of the time of the convention was occupied in preliminary business, and in the election of officers, compelled to enter at once on the duties of their offices, without that wisdom which experience alone can give. It was not strange, then, that an occasional criticism should reach our ears from those who looked to us for the elucidation of causes and laws of zymotic and epidemic diseases, and a high standard of medical literature and education.

There had however been progress made, in the requirements of medical education, within twenty years. In most colleges the lecture term had been increased from thirteen and sixteen weeks,

to eighteen, and in some to twenty-four weeks. Organic chemistry, microscopic anatomy and general pathology, had been added to the list of professorships; chemical instruction of a thorough character is provided by two-thirds of our Medical Colleges, and students have clustered more thickly around the great hospitals, as those of Boston, New York, and Philadelphia.

It is true all this had not been wholly accomplished by this Association, but much had resulted from the concentration and expression of professional sentiment through it, and its influence in increasing the number of standard medical works and essays had been great, and the medical press of the country teems with original papers of high character.

Finally, it had removed sectional jealousies, and awakened liberality, hospitality, and fellowship among those who dwelt far apart.

All this should lead us to place faith in the Association, and to desire its prosperity and perpetuity, as really a means of inestimable blessing and good.

The details of business and recommendations regarding them, formed the next topic of the speaker. The morning should be devoted to general business, the presentation of reports, educational subjects, etc.; the afternoons and evenings, except one, to the discussion of scientific or general subjects, in the meetings of the different sections; and the one evening devoted to sociability, should be free and unrestrained, where ladies and gentlemen could mingle and promenade freely, and where no ostentatious show or rich viands should be allowed to enter.

Reports and papers relating to the scientific and practical interests of the Association, should be presented and referred the first day. The different sections or sub-divisions too, should be more thoroughly organized, with a president and thoroughly qualified secretary, chosen every year, and rules adopted, one of which should be, that every paper referred to it, should be complete and fit for publication, if thought necessary to print it, that it may not be retained by the author. Every paper referred to the publication committee should be thoroughly examined by the section, and a surplus of papers might be referred to subcommittees, to be transmitted within thirty days after, to the permanent secretary. The benefits that would result from such rules were adverted to at length; the appointment of a long list of special committees was discountenanced as inoperative and cumbersome.

An active spirit of experimental research, and of rigid deductive investigation should be fostered



by the Association. Each section should designate two or three topics for its investigation the coming year; measures might be taken to increase the number of papers of a high professional value, as the quality, not the bulk, is what will give character to the printed transactions, and to the Society, and steps should be taken to secure a record of thermometrical, hygrometrical, electric, ozonic, and other atmospherical conditions in each geographical section of our country for at least ten years, with a corresponding record of the prevalence of diseases.

He submitted several suggestions for the consideration of the members, for the development of a more complete, systematic and efficient method of transacting all the important business of the Association, which were as follows: That the great object is to perfect and perpetuate what has been already so well begun; that the Association had existed long enough to have outlived the uncertainties of its childhood, and it was time that its principles, its modes of action, and its important objects were clearly defined, methodically arranged, and matured to the steadiness and vigor of early manhood. He remarked that many of the most renowned members of the profession who took part in the formation of the Association, and watched over its earliest years, have been gathered to the home of their fathers, and the nineteen years of active toil that had been added to the lives of many others, have carried them beyond the period of ardent, active labor, to the more quiet era of ripening age. They still mingle with the members, and at each returning anniversary meeting their counsel is sought. The question was asked, whether this Association, that has already accomplished so much for the advancement of the educational, scientific and social interests of the profession, depended entirely upon the generation who are now in the active, vigorous period of early manhood. If those before him had imbibed the spirit of the founders of the Association, it would not only be perpetuated, but its beneficent influences widened.

If the generation into whose hands are now passing the labors, the honors, and the responsibilities of our time-honored and most beneficent profession will give heed to the suggestions of reason, the American Medical Association will not only outlive whatever changes and convulsions may be in store for our loved country in the future, but its members will annually come up from the North, the South, the East and the West, to sit in social harmony, and plan additional means for alleviating human suffering, so long as civilization itself shall continue to bless the tribes of earth. Finally, let us all remember not only

while transacting the business of the annual session, but also in all the work that is before us in the future, that the great object of a virtuous and happy life is neither worldly honors, or worldly treasures, but an inward consciousness of doing good from day to day.

During the delivery of the address, the speaker was frequently interrupted by long continued applause. A vote of thanks was returned for his able and interesting address, and a copy requested for publication.

An invitation from Mayor LINCOLN on behalf of the city was received, and accepted, to an excursion down the harbor at 1 o'clock, Thursday, from Commercial wharf.

[Remainder next week.]

## EDITORIAL DEPARTMENT.

### Periscope.

#### Borax a Substitute for Ergot.

The *Pacific Medical Journal* says, "E. HOWARD MOORE, an English obstetrician, uses borax as a substitute for ergot, in doses of two scruples, dissolved in water. He considers it not capable of producing uterine contractions *ab initio*, but operating only when the uterus is disposed to act. The effect is to produce 'constant and unremitting contractions of that organ, which speedily put an end to labor.' It seldom disturbs the stomach. A second dose may be given if necessary, after an interval of twenty minutes."

#### Treatment of Acute Tonsillitis with solid Nitrate of Silver and Incisions.

Dr. PARKS said, at a recent meeting of the "Boston Society for Medical Improvement, (*Med. and Surg. Journal*) that he had been for a number of years in the habit of treating acute tonsillitis, when seen early, by applying solid nitrate of silver all over the inflamed surface. When the appearances indicate much engorgement, he also lances the gland to the depth of half an inch, in one, two, or three places. Neither operation is so painful as might be expected. The relief which has followed, even in severe cases, has been so great and so speedy that he could but attribute it to the treatment. During the preceding winter, Dr. PARKS had treated a patient for this affection with similar results, and much to her surprise, as she had been long subject to occasional attacks, and never before had been convalescent under three weeks, often being ill with them longer than that. Dr. P. said it might be argued that the inflammation in these last two attacks was predestined to rapid resolution, and would have occurred without treatment. But this was only one of many similar instances, and he remembered no case of failure. He recollected one patient in particular, who said his attacks of tonsillitis usually (or always) terminated in suppuration; and in and in whom abscess was strongly threatened, but did not occur, free cauterization and lancing having been used.



## MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, JUNE 10, 1865.

## THE YELLOW FEVER PLOT.

In the early part of the rebellion it was the expectation of its leaders, that the diseases peculiar to a southern latitude would seriously interfere with the efforts of the Government to put down the rebellion. But through proper precautions and a kind Providence, that expectation having failed, the attempt has been seriously made to introduce disease indiscriminately through the country.

Last year we had occasion to report the prevalence of, and great mortality from, yellow fever, in Newberne, N. C. Nothing was then known of the origin of the disease. From recent developments, however, its importation there seems to have been one of the acts in the foul conspiracy against the life of the nation, which during the past four years have cost so much of treasure and of blood, and nothing but the good Providence of God, which has in so many ways been manifested toward our nation, seems to have prevented a further spread of the disease.

The late rebellion has shown treason to be the sum of all villainies. Conceived in oppression and ambition, nurtured by falsehood, supported by perjury, offering its victims on the battle-field by the hundred thousand; robbing prisoners and murdering them in cold blood; aye worse than this, starving them to death by thousands; assassinating their best friend in the person of our late noble and good President, ABRAHAM LINCOLN, the testimony against its authors has culminated in the recent disclosure of the most horrible plot of all, which we present to our readers in the form of an affidavit made before a Canadian justice of the peace.

*Province of Canada, County of the City of Toronto:* The information and complaint of FRANCIS MCGARRY, of the City of Toronto, Detective Police officer, taken the 10th day of May, in the year of our Lord 1865, before the undersigned, one of Her Majesty's Justices of the Peace in and for the said county of the City of Toronto, who saith that he has made diligent inquiry into the circumstances hereinafter mentioned, and he hath good reason to believe, and doth verily believe, that LUKE P. BLACKBURN and one GODFREY JOSEPH HYAMS, and divers other persons unknown, did, at the said City of Toronto, on or about the 15th day of April, in the year of our Lord 1864, combine, conspire, confederate and agree among themselves to commit the crime of murder in the United States of America, by importing and introducing from Her Majesty's dominions into certain cities of the said United States of America, to wit: the City of Washington, in the District of

Columbia; the City of Norfolk, in the State of Virginia, one of the said United States of America; and the City of Newberne, in the State of North Carolina, one of the said United States of America, and there disposing of, to and amongst the inhabitants of said cities, divers large quantities of shirts, blouses, coats, and other articles of clothing, infected with the virus of yellow fever and other deadly, poisonous and noxious substances, calculated and liable to produce said fever, for the purpose of creating and spreading the said fever amongst the said citizens, and of causing the death of the said citizens by means of said yellow fever and the poisonous, deadly and noxious substances aforesaid. And that, in pursuance of said conspiracy, combination, confederation and agreement, the said LUKE P. BLACKBURN, to wit, the 1st day of June, 1864, did cause to be exported and sent from the said City of Halifax, in the Province of Nova Scotia, divers, to wit, tea-trunks containing such infected clothing into the said United States, and did cause the said infected clothing to be disposed of and sold in the said Cities of Washington, Norfolk and Newberne, to and among the citizens thereof, for the wicked and unlawful purpose, and with the wicked intent aforesaid; and that by means of the said infected clothing, so imported in and disposed of as aforesaid, in the said cities, in pursuance of said conspiracy, the death of divers persons in said cities, to the informant unknown, was caused and procured.

Wherefore the said informant prays that a warrant may be issued for the arrest of the said LUKE P. BLACKBURN, on the charge aforesaid.

FRANCIS MCGARRY, Detective.

Sworn before me the day and year first above written, at the City of Toronto aforesaid.

JAMES J. VANCE, J. P.

There is the record of one of the most diabolical crimes that it is possible for the mind of man to conceive of. And yet its originator, Dr. LUKE P. BLACKBURN, and its agents and apologists, walk the earth, and it does not open and swallow them up, and the lightnings of heaven do not smite them!

Thanks to a kind Providence the foul plot was first proven before two different British Courts, one in Bermuda and the other in Canada, provinces of a country whose authorities have done all that it was possible for them to do to aid and foster the rebellion of which this crime was a desperate expedient to insure success.

We have awaited the development of the history of this foul crime, which, according to sworn testimony appears to be this. In the fall of 1863, this fellow, Dr. LUKE P. BLACKBURN, appeared in Canada as an agent of the rebel government, provided with funds by it, for the purpose of serving the rebel cause by introducing yellow fever and other diseases into Washington city, and along the Atlantic coast South of that city, with the intention of creating a panic, and demoralizing the

Government troops. In December he engaged the services of one HYAMS to carry out his nefarious plans. On the 10th of May, 1864, BLACKBURN writes to HYAMS from Havana, through a confederate in Toronto, Rev. Dr. STUART ROBINSON, and orders him to meet him in Halifax. Through Dr. ROBINSON, and other confederates, funds were provided, and HYAMS went to Halifax. BLACKBURN arrived there from Bermuda on the 13th of July, with two large, and three medium sized trunks.

HYAMS having received from Dr. BLACKBURN the trunks of infected clothing obtained in the manner detailed above, left Halifax on the 24th or 25th of July, and smuggled the goods into Boston, from whence they were expressed to Philadelphia, and hence to Baltimore, where they were sorted, and prepared to be sold at auction. In the meantime HYAMS had to go to Canada to procure more funds, where he was congratulated on his success. He immediately returned to Baltimore, from whence a portion of the goods were sent to Washington, where they were sold at auction. The rest were sent to Norfolk and Newberne, where they were disposed of. A few days afterward yellow fever broke out in Newberne, but through a kind Providence, the other attempts to introduce the disease failed. Among the goods was a valise specially designed as a present to President LINCOLN.

This effort having partially failed, BLACKBURN seems to have entered upon the work again in the fall of 1864, and claims to have been employed by the British Government to proceed to Bermuda to treat yellow fever cases. How he treated them, and what a harvest he was laying in store for our principal cities this year, may be learned from the following record. It seems that in April last, one EDWARD C. SWAN was brought to trial at St. George's Bermuda, in whose possession were found three trunks. BENJAMIN BURLAND, a Health officer, testified that he found in the trunks sundry articles of clothing, as follows:

"In the green trunk, which was open, I found shirts and guernseys, quite new and unwashed, in the top of the trunk; I directed the Inspector of Nuisances to take an inventory of the clean and unworn articles, while I made an inventory of the more suspicious articles; I next found a white blanket, nearly new, but covered with dark stains, some large, others small; they bore all the traces of having been used in a sick chamber; the stains resembled those from 'black vomit,' and which I have before frequently seen; the next thing was an old clothes-bag—then several guernseys, apparently new and unworn, and finally, at the bottom of the trunk, a sheet very extensively stained; some of the stains were of a dark color, others yellow, as if from mustard; there were marks on

the trunk, but I did not regard them, and took no notice of them; the portmanteau was locked, and I had it broken open, and found on the top a woollen shawl, old, but free from stains, then a pair of drawers, very dirty, with yellow stains, as if from mustard, then socks, a pocket-handkerchief, coat and trowsers, all worn and dirty, next a quantity of guernseys, shirts, both flannel and cotton, all apparently new and unworn; then two pillow-slips, very much soiled, and a shirt, stained as if from port wine, and finally a sheet at the bottom, stained all over with some kind of a dark color; others lighter, also mustard stains. The black trunk was corded and locked; this I also ordered to be broken open. I found in it first shirts, both cotton and woollen, quite new; then a shirt and guernsey, stained and very dirty; then a white pocket-handkerchief, with dark-colored stains, and a few dark spots such as would be produced by black vomit; next a bandage of linen, deeply stained by mustard; then two blankets, quite free from stains, but not new blankets; next a pair of drawers and socks, much worn and dirty; and, lastly, two pillow-slips on the bottom, also stained as if from perspiration."

As to the object intended to be accomplished, FREDERICK BUCKSTAFF testified as follows:

"About a month ago, Mr. SWAN told me what the trunks contained, and repeated a conversation he had with Dr. BLACKBURN, and which was to the effect that the clothing in the trunks came from yellow fever patients, and that they were intended to be sent to New York or Philadelphia, or it may have been to both places. . . . Mr. SWAN told me that Dr. BLACKBURN had informed him that the intention of sending the clothing to New York was for the destruction of the masses there."

The mode of obtaining the infected clothing is detailed in the affidavits of DINAH AMORY and FRANCES CAMERON, nurses. MRS. AMORY testifies that Dr. BLACKBURN attended a housemaid, (who, by the way, does not seem to have had yellow fever, though others in the house had it,):

"He attended her for the first time on Friday morning. I also nursed her on the Saturday following; Dr. BLACKBURN again visited her, and said she must have more covering, and be sweated more. I requested a blanket from Miss CROWELL, but she told me she did not wish any others used but those which had already been done with the fever patients. I did not think the woman required any extra clothing, as she was sweating profusely at the time. When Dr. BLACKBURN returned and found I had not put any extra blankets or covering over her, he seemed annoyed, and told me to come to his room, and I did so; and I then helped him to lift down a trunk, from which he took some guernsey coats, trowsers, and different things, all of them being woollen, and laid them over her and around her, as he said, to prevent the air from getting to her; and he ordered me not to disturb them till he returned. He put the things on the top of the bed-clothes; he took the trunk, with my assistance, into the room of the servant woman. During the night, the woman was so exhausted by the sweating and the weight of the clothes, that I removed the things

placed over her by Dr. BLACKBURN, down to her feet, and when he returned at four o'clock on Sunday morning, he scolded me for removing any of the things before he came. *He then took all of the things and placed them back in his trunk.* Dr. BLACKBURN said the woman was suffering from yellow fever, which was broke in about twenty-four hours. After the Doctor had repacked his trunk, I assisted him to take it back to his room; I do not know what became of it afterward. I cannot say whether the articles were stained or not; but I do not think they could have been, as there were two blankets between them and the patient. She was not sick at the stomach."

Mrs. CAMERON testifies:

"Dr. BLACKBURN attended one of the patients that I nursed—a Captain GALLOWAY, of the Confederate army, but who had lately been pilot of a steamer; he was one that died. I only attended him from eight o'clock on Sunday night, and he died at quarter to one on Tuesday morning. Dr. BLACKBURN came to the house about twelve o'clock, and remained there until he died. After he was dead, Captain STEVENS—Mrs. SLATER's son-in-law—asked what was to be done with the clothes; I supposed he meant the clothes he died in; and then Dr. BLACKBURN turned to me and said: 'You go out of the room for a little while,' and I went out. Captain STEVENS immediately followed me, and gave me directions to go at once and see about his being buried; he then turned round and said: 'I must go up and see what is to be done about the clothes.' When I returned, about an hour afterward, I found the dead body shrouded, but I saw nothing of the clothes that had been taken from him; I do not know what became of them."

Mr. W. STEVENS and Mrs. SLATER deposed to substantially the same facts. Mrs. SLATER said that many articles of bed-clothing that were used about the patient, were missing after his death. She suspected some of the servants of having taken them.

Here is one of the most horrible records that ever was made. A fiend, and he a physician, in the employ of what professed to be "a Government," engaged in efforts to spread "among the masses" in this country, a virulent and fatal disease, which, when it broke out in former years in Southern cities, enlisted the sympathies and co-operation of our profession in all parts of the country in behalf of those who were afflicted. It were too much to believe, if it had not the most convincing testimony to support it!

## Notes and Comments.

### American Medical Association.

This body met at Boston on Tuesday morning last, and was welcomed in a neat address by Dr. HENRY J. BIGELOW. The President, Dr. N. S. DAVIS, of Chicago, Ill., was in the chair, and about five hundred delegates were present.

We have a reporter on the spot, who is furnish-

ing full reports of the proceedings, a portion of which will be found in the present number, and the rest will be given next week.

### Connecticut State Medical Society.

The annual convention of the Connecticut State Medical Society met at the hospital in Hartford, May 24th. The following officers were elected for the ensuing year:—*President*, Dr. N. B. IVES, of New Haven; *Vice President*, Dr. ISAAC G. PORTER, of New London; *Treasurer*, Dr. J. C. JACKSON, of Hartford; *Secretary*, Dr. M. C. WHITE, of New Haven. Twenty-four Fellows from the State Society were present; also two delegates from New Hampshire, and two from New York. Dr. HUNT, from the committee of Award, announced that the prize of \$50 for the best essay on the means of preventing consumption, has been given to Dr. G. W. BURKE, of Middletown. Dr. N. B. IVES, of New Haven, presented to the Society \$50 as a prize for the best essay the coming year. At the afternoon session, Dr. BRONSON, of New Haven, read an interesting biographical sketch of the late Dr. CHARLES HOOKER, Professor of Anatomy at Yale College. In the evening, Dr. E. K. HUNT, of Hartford, retiring President of the Society, read a highly instructive address at Representatives' Hall. After the delivery of the address, the members, at the invitation of the Hartford Society, repaired to the Trumbull House, where a sumptuous collation was prepared for them.—*Hartford Courant*, and *Boston Med. and Surg. Journal*.

## Correspondence.

### DOMESTIC.

#### Expulsion of a Fleishy Mass from the Uterus.

EDITOR MED. AND SURG. REPORTER:

Mrs. E., aged about 30, of dark complexion, a German by birth, rather below the medium size, and the mother of four children, was quite unwell, having had ague. Had not menstruated for six months, and supposed she was pregnant; but she felt different from what she felt in her previous pregnancies. Her abdomen was enlarged, and I did not doubt but that she was pregnant. I heard no more of her until the 20th of December, 1864, about ten months after the occurrence above alluded to, when I was sent for in great haste; and when I arrived, she was suffering the most excruciating labor pains. About the time that I was ready to make an examination, there was expelled a fleshy tumor about five inches in length to three and a half in thickness, without in the least abating her suffering.



After examining the abdomen, and making vaginal examination, I discovered no cause for such intense suffering. The uterus was contracted, and smaller than after an ordinary labor; consequently, I administered half a grain of morphia, repeating it in thirty minutes. Waiting thirty minutes more, and finding her still suffering, gave perhaps a quarter of a grain more, which relieved her and caused her to fall asleep. In an hour after, I took my leave, leaving her half a grain of morphia, to be given if her pains should return, which was given in four or five hours after, as her suffering was returning. I saw her the next day, when she was quite comfortable, with the exception of some after-pains, discharging the lochia as in an ordinary case of confinement. From the time that she ceased to menstruate until she was confined, she had very delicate health.

March 20. I saw her to-day. She is pretty well, and has menstruated regularly every four weeks. I report this case, not because I think it is very instructive, but because it is a case of rare occurrence, and consequently interesting.

ERWARD A. OPPELT, M. D.

Trenton, Ohio, May, 1865.

## News and Miscellany.

### Prevalence of Disease of the Heart.

Among the men transferred to the Veteran Reserve Corps, in the U. S. service, during 1863, disease of the heart existed in the ratio of 69.30 per 1000, or 1 in 14.4; it also caused, in the first two months of the year, the discharge of 137 per 1000 from the service.

### Perfect Anesthesia!

A Nevada paper mentions that a Dr. Ross, being a merciful man, was about to clip the ears of a fine-blooded rat-terrier. He accordingly procured some chloroform, and after administering several doses by means of a sponge, succeeded in producing a satisfactory state of insensibility. He clipped the pup's ears beautifully, and wired them up in splendid style. So far the operation was a success, but when he came to wake up his patient, the juvenile canine was dead!

### MARRIED.

CUSHING—PILLSBURY.—In Salem, Ohio, on the 4th ult., by Rev. A. B. Maxwell, Clinton Cushing, M. D., and Georgianna D. Pillsbury, formerly of Augusta, Me.

DEMAREST.—DOUGLAS.—On Wednesday, May 31, at the residence of the bride's parents, by the Rev. Samuel Burchard, D. D., Dr. Samuel Demarest, and Maggie T., eldest daughter of James Bogert, all of New York city.

FENNER—CARPENTER.—On Thursday, May 25, by the Rev. James Fenner, Mr. William G. Fenner, of New York, and Elmina, daughter of A. B. Carpenter, M. D., of North Greece, N. Y.

HOOPES—WORTHINGTON.—On the 22d ult., at the residence of the bride's father, West Chester, Pa., Abner Hoopes, and Melinda M., daughter of Dr. Wilmer Worthington.

KIPP—HYATT.—On Wednesday, May 31, by the Rev. E. H. Chapin, William H. Kipp, and Emilie A., daughter of the late James S. Hyatt, M. D., all of New York.

RANDOL—TERRINE.—On Thursday, June 1, by Rev. J. Paschal Strong, James B. Randol and Crissie, daughter of G. Terhune, M. D., all of Passaic, N. J.

READ—WURTS.—On Friday, the 2d instant, by the Rev. Dr. Hall, of Trenton, Z. Read, M. D., of Mount Holly, N. J., and Elizabeth G., daughter of the late William Wurts, of this city.

SEAMAN—BATCHELDER.—In Pelham, N. H., at the residence of the bride, May 24, by Rev. Augustus Berry, Mr. Henry G. Seaman, late of U. S. A., and Miss Mary W., daughter of Amos Batchelder, M. D., of Pelham.

### DIED.

CRITTENDEN.—At Dover, N. J., on Friday, June 2, Robert, son of Dr. Thomas R. and Louisa M. Crittenden, aged 7 years and 6 months.

DUFFEE.—At Marlton, N. J., on Friday, June 2d, 1865, of malignant scarlet fever, Francis Lewis, youngest son of Dr. Washington J. and Mary Ann Duffee.

EDWARDS.—On Thursday, June 1, at his residence in New York, Frank S. Edwards, Esq., M. D., son of Charles Edwards, Esq., aged 39 years.

SMITH.—At Bermuda, Tuesday, May 30, Jennie K., wife of Henry H. Smith, M. D., and daughter of H. L. Knight, Esq., of New York, aged 28 years.

### ANSWERS TO CORRESPONDENTS.

Dr. J. W. M., Shippensburg, Pa.—Turnbull on Deafness, sent by mail, June 2d.

Dr. J. A. A., Waterford, Pa.—Beasley's Druggist's Receipt Book, sent by mail, June 2d.

Dr. F. J. S., Eaglesville, Pa.—Amputating saw and knife, tournaquette, sent by mail, May 31st.

Dr. F. R. P., Marshall, Ill.—Dunglison's Medical Lexicon, sent by mail, May 31st.

Dr. S. R. M., Hillsdale, Mich.—Jones Ophthalmic Medicine and Surgery, sent by mail, May 31st.

Dr. G. C., Charleston, S. C.—Bedford's Obstetrics, sent by mail May 31st.

Dr. L. S., Millbury, Mass.—Hand Book of Skin Diseases, by Hillier, sent by mail, May 31st.

Dr. W. W. S., Kelsey, Pa.—Kolliker's Microscopical Anatomy, sent by mail, June 3d.

Dr. J. F. B., Hobbs, N. Y.—Roosa's Medical Lexicon, Hartshorne on Glycerine, sent by mail, May 31st.

Dr. W. H. R., Coughdenoy, N. Y.—Hartshorne on Glycerine, sent by mail, May 31st.

Dr. W. S. R., York, Pa.—Pereira's Prescription Book, sent by mail, May 31st.

### METEOROLOGY.

May	29,	30,	31,	J. 1,	2,	3,	4.
Wind.....	N. E.	E.	N. W.	W.	S. E.	E.	S. W.
Weather.....	Cl'dy.	Cl'dy.	Cl'dy.	Clear.	Clear.	Foggy	Foggy
Depth Rain.....				Heavy		morn-	morn-
				ing		ing.	ing.
Thermometer.							
Minimum.....	54°	57°	60°	61°	67°	61°	66°
At 8 A. M.....	61	69	70	76	77	69	72
At 12 M.....	68	70	79	80	80	81	85
At 3 P. M.....	69	71	80	83	84	81	87.
Mean.....	63.	66.75	72.25	75.	77.	73.	77.50
Barometer.							
At 12 M.....	29.9	30.1	30.2	30.1	29.1	30.2	30.1

Germantown, Pa.

B. J. LEEDOM.

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" XII. Nos. 1, 5, 11, 12, 17, July 2, Sept. 10, Oct. 22, 29, '64, Feb. 4, '65.

We are in pressing need just now of a few copies for new subscribers, of No. 414, Feb. 4, 1865.